citizenry. At any rate, the initiative petition for such a law—threatened in 1939 in the Assembly Halls at Sacramento as certain to have a place on the State election ballot of November, 1940—has not materialized. That does not mean, however, that leaders among the advocates of a compulsory health law have cast their plans aside. Rather, doubtless, for the moment, they are willing to bide their time until political and other conditions better warrant success in the attainment of their objectives. Whether they are earnestly studying the deficiencies in their paper plans is not known; but that there is certainly need for such intensive application by them, if they would more truly understand the cause they have espoused and promoted as a prophylactic and cure for the hardships so often associated with sickness and injury—especially among citizens of lower-bracket income—must be evident to all who have listened to their discussions and claims. Perhaps, if they would continue their studies, laying aside at the same time some of their prejudices and past conclusions, as arrived at by so many on the basis of erroneous premises, they may yet be persuaded to understand that adequate medical service comprehends not only the element of *quantity,* or number of physicians, but the even more important factor, *quality,* or kind of medical service to be rendered.

* * *

Further Study Indicated for Proponents of Compulsory Health Systems.—In spite of the marvelous advances in conservation of health and life—in which the United States leads the world, and let it not be forgotten, advances made under the existing system of medical practice—it still remains true that a host of well-intentioned theorists display an almost hopeless incapacity to properly orient themselves concerning the healing art, and the means through which, in practice, it has attained its excellent results; and also why changes in medical practice procedures advocated in compulsory health system statutes would make worse, rather than improve, any existing deficiencies.

* * *

Causes and Effects Are Confused.—This existence of erroneous thinking by such persons is difficult to understand, since it can so easily be demonstrated that the responsible factors, for whatever inadequate service may exist, are to be found in most instances, not in the set-up of private or public health medical practice as now existing, but rather in the contributory causative agents of disease, such as poverty, vicious habits, hereditary taints or other conditions. If these elements could be eliminated as etiologic factors, the number of citizens, concerning whom it might be stated that their health or lives had been endangered through lack of accessible medical care, would, in most states of the Union, be found to be almost inconsequential. Wherefore, in this interim between active propaganda campaigns for a compulsory health law for California, the advice is given to proponents of such a measure: that they assiduously endeavor better to comprehend the real nature of the problem they seem so anxious to solve.

A DEPARTURE IN DENTAL EDUCATION: HARVARD'S "SCHOOL OF DENTAL MEDICINE"

Doctors of Medicine in Dentistry.—A notable advance in dental education has recently been announced by Harvard University, that institution having decided no longer to conduct its dental department along the lines of other schools of dentistry, but hereafter as a four-year medical course, with a fifth year devoted to technical and mechanical procedures. In short, Harvard University offers, to matriculants in its dental school, a curriculum in which dentistry will be considered as a specialty in medicine rather than as a separate profession. This radical change in dental teaching has been made possible, in part, through an allocation by the Rockefeller Foundation of "$400,000 as endowment to the School of Dental Medicine of Harvard University, on condition that the University increase endowment of the School by $2,150,000; $1,000,000 to be transferred from University funds and $1,150,000 to be secured elsewhere before October 1, 1941."

The annual report of the Rockefeller Foundation for 1939 states:

> In recognition of the present situation in dentistry, Harvard University has drafted a reorganization of its dental school, which will place dentistry on the basis of a specialty of medicine. The Dental School will become the School of Dental Medicine, and graduates of the School of Dental Medicine, after finishing the same preclinical courses and much of the same clinical work given the medical students, will be entitled to the degree of Doctor of Dental Medicine.

* * *

Reasons for the Change.—The Rockefeller statement also presents the following pungent thoughts, with which many physicians will agree:

> Most students of dental education believe that a shift from emphasis upon mechanical ingenuity to emphasis upon the biological sciences underlying medicine itself, but equally applicable to dentistry, would form the wisest course for the improvement in dental education. The dentist stands to gain from a wider knowledge of medicine—and he knows it. The physician would profit from a better knowledge of the factors underlying the anatomy, physiology, and pathology of the oral cavity—whether he knows it or not. The time has arrived for some active and intelligent team play between a well-supported school of dentistry and a school of medicine.

It will be interesting, therefore, to observe how this new plan of dental education and training will be received by dental schools in the United States and also to note as the years go by the influence of this experiment upon American medical and dental schools.

ON VARIOUS TOPICS

Disease Outbreaks Resulting from Faulty Environmental Sanitation.—It may be of interest to some physicians to learn that not until last year did the United States Public Health Service authorize "a nation-wide survey of outbreaks of disease caused by faulty sanitation in general."

In an interesting article, appearing in *Public Health Reports,* Vol. 55, No. 31, August 2, 1940, Leslie C. Frank, Senior Sanitary Engineer, U. S. P. H. S., calls attention to the fact that the reports

on food, water and similar outbreaks received from different states are far from complete, not only as to the number occurring in different commonwealths, but also as to the epidemiologic backgrounds of the outbreaks. Further, that in some instances, where proper studies have been made, State officials have failed to send to Washington copies of the reports of their findings.

For instance, as regards outbreaks due to milk and milk products, it is stated that:

New York State, California, and Minnesota combined reported nearly as many milk-borne outbreaks as all the rest of the country combined, although these three states represent only about one-sixth of our entire population.

Frank concludes his article with the following significant comments:

All in all it seems safe to estimate that there are probably 5 to 10 or more times as many outbreaks, cases, and deaths resulting from faulty sanitation as are herein reported for 1938. Such an estimate would then represent 1,000 or more deaths per year resulting from faulty sanitation. That this is a conservative estimate is evidenced from the fact that during the past five years the total number of cases of typhoid fever alone occurring in the United States has been from 12,000 to 18,000 per year, and the fact that most typhoid fever cases are probably the result directly or indirectly of some breakdown in environmental sanitation.

Finally, it should be noted that the above discussion takes no account of the fact that typhus fever, with 2,300 cases and 137 deaths in 1938; undulant fever, with at least 2,000 to 3,000 cases per year; and malaria, with several hundred thousand cases and several thousand deaths per year, are all the result of faulty environmental sanitation.

* * *

"Quarterly Journal of Studies on Alcohol."—With governments, the consumption of alcohol by citizens always means the creation of social and other problems. In the United States, the attempt to do away with the evils of alcohol, through prohibition, only made matters worse. However, since the repeal of that federal law, some of the evils associated with the use of alcohol as a beverage have not greatly abated.

To meet a need for accurate study of the alcohol problem, with special relation to its medical phases, a new publication has appeared, the *Quarterly Journal of Studies on Alcohol,* with Howard W. Haggard, M. D., as editor, and brought off the press in New Haven, Connecticut. Volume I, Number 1, contains among its articles: "Personality Factors in Alcoholic Addiction"; "The Influence of Alcohol on the Digestive Tract"; "The Effects of Alcohol on the Normal and Pathologic Kidney"; and "Effects of Alcohol on the Individual."

Physicians who are interested in the subject should obtain copies of this recent addition to medical publications.

* * *

Michigan's Physicians and the State Governor.—The medical profession in States of the Union other than California also have their legislative trials and tribulations. A recent issue of the *Journal of the Michigan State Medical Society* played up with brief, biting comment, in wide display spacing, a list of experiences with the gubernatorial powers in the Wolverine State. For whatever consolation may be derived therefrom, and also to bring out the fact that the physicians of Michigan do not hesitate to state their case in print, the list of charges is here given:

HERE'S WHAT THEY DID TO YOU [TO PHYSICIANS IN MICHIGAN]

July, 1939

The Crippled Children's Commission cut 33 per cent from Schedule A (without consultation with the medical profession).

October, 1939

Schedule A was restored by the Crippled Children's Commission (without consultation with the Administration).

November, 1939

You were accused of being hi-jackers by a spokesman for the Administration.

December, 1939

You were told to take it and like it (by the legal advisor to Governor Dickinson).

March, 1940

A decrease of 40 per cent was ordered by the Administration in spite of your protests.

Now

What are *you* going to do on September 10 at the Primaries?

And on November 5 at the Election?

* * *

Ophthalmological Facts, Fads and Fallacies. The July number of the *United States Naval Bulletin* prints an article from the pen of R. C. Boyden, M. D., Lieutenant, Medical Corps, U. S. N., having as its opening sentence:

Too many *synthetic ocular symptoms* are accepted by the medical profession without scientific investigation. . . .

In a paragraph that follows, the author goes on to say:

The following observations are the result of the writer's findings and opinions only. It has been noted that, in the Navy, the number and variety of complaints of an ocular nature have been on the increase in the past several years. This may be due to any one or combinations of the following factors:

1. Misinformation circulated by retailers of glasses whose profits vary from 3 to 22 dollars on each sale, and health articles pertaining to ocular symptoms due to so-called eye-strain.
2. Exaggerated belief in the value of glasses for the relief of symptoms.
3. Neurotic fixation or inadequate personality.
4. Definite malingering and desire to excite sympathy.
5. Reluctance to make cruises because of family or other ties ashore.

Discussing the complaints made by the sailors, Lieutenant Boyden refers to a number of such as "synthetic symptoms," making the following comments:

The term *synthetic symptoms* has been used to characterize the complaints voiced by patients in which no pathology can be demonstrated. The examinations used to rule out pathology were complete and included all of those well known to those doing ophthalmological work. The symptoms most frequently encountered were:

1. Headache: (a) Usually bitemporal, and cast in the same mould with the headaches of neurosis or hysteria.
2. Burning sensation in the eyes: Following periods of reading or movies.
3. Blurring of vision: Following short periods of reading or study.
4. Poor vision: Usually unilateral.
5. Sensitivity to light.
6. Postorbital pain.
7. "Pulling sensation."
8. Muscular twitching of lids.
9. Diplopia.

10. Astigmatism: A popular expression among the laity and occasioning a garrulous recital of previous examinations and opinions of unscientific advisors.
11. "Eye-strain": A general symptom complex embracing any one of several of the above symptoms.
12. Blindness: (a) Unilateral or bilateral. (b) Sudden onset.

Among the reasons for his article, the author lists:

1. The increasing frequency with which young healthy men recently accepted in the naval service with normal vision are appearing in naval ophthalmological clinics with synthetic symptoms and routine requests for refraction.
2. The incessant drain on the medical officer's time, averaging 1 hour and 15 minutes per patient, in ruling out possible pathology in these individuals, and the resultant loss of time available for examination and treatment of those who present themselves with genuine symptoms based on organic lesions.

The above quotations are given because they may be worthy of consideration by physicians in private practice, especially by practitioners who consciously or unconsciously refer patients to optometrists instead of to doctors of medicine who are eye specialists.

Other State Association and Component County Society News.—Additional news concerning the activities and work of the California Medical Association and its component county medical societies is printed in this issue, commencing on page 132.

EDITORIAL COMMENT†

GELATIN AND PHYSICAL ENDURANCE

The public is at present subjected to a barrage of advertised claims, the alleged strength-producing or fatigue-reducing effects of gelatin as a supplementary food. According to Doctor Hellebrandt[1] and his coworkers of the Department of Physiology, University of Wisconsin, these claims are at present unwarranted, based on misinterpretations of inadequately controlled gymnasium tests.

That glycin is an amino-acid capable of increasing the creatin content of skeletal muscle is an established fact, the basis for proposed methods of treatment of certain myopathies. Gelatin contains 25 per cent glycin. About a year ago Ray, Johnson and Taylor,[2] of Long Island College of Medicine, attempted to apply gelatin therapy to normal individuals. Selected athletes on habitual diets were given a daily endurance test on a bicycle ergometer and afterward retested on the same diet plus 45 to 60 grams daily intake of commercial gelatin. The Brooklyn physiologists noted a gradual increase in the daily maximum energy output on this supplementary diet, the recorded muscular work being increased about 100 per cent by the fortieth day. Supplementary gelatin feeding was then discontinued. A 33⅓ per cent fall in maximum energy output was noted by the 110th day. Assuming that the supplementary gelatin is the only variable in these tests, the Brooklyn physiologists concluded that the glycin fraction of gelatin is a specific food, increasing muscular endurance and, therefore, decreasing muscular fatigue.

Doctor Hellebrandt and his coworkers call attention to the fact that gelatin is not the only variable in such endurance tests. The protein content of habitual diet, psychical factors, training effects, and athletic "staleness" must also be taken into account. In the hands of the Wisconsin investigators, athletes maintained on their habitual diets increase their maximum daily endurance fully 100 per cent by the end of sixty days solely as a result of training. Gelatin added to the habitual diet during this period neither increases nor decreases the rate of athletic improvement. Moreover, "staleness" effects began to be apparent after the sixtieth day of maximum daily work, a 15 per cent reduction in maximum endurance being recorded by the one hundredth day. Gelatin added to the habitual diet during this period neither prevents nor hastens the rate of development of this "staleness." If the Wisconsin data are confirmed, the alleged fatigue-reducing effects of gelatin are illusory, a misinterpretation of effects observed on fortuitous additions or withdrawals of gelatin at critical periods during athletic training.

Gelatin, of course, has a legitimate place in dietetics. Many habitual diets are deficient in protein, and might conceivably be improved by the addition of gelatin. Gelatin, however, is an "incomplete" protein, being deficient in certain essential amino-acids. Control tests of the possible fatigue-reducing effects of other proteins are now in progress in two eastern medical schools. Clinical judgment, therefore, should be reserved till the promised statistical evidence is available.

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† This department of CALIFORNIA AND WESTERN MEDICINE presents editorial comments by contributing members on items of medical progress, science and practice, and on topics from recent medical books or journals. An invitation is extended to all members of the California Medical Association to submit brief editorial discussions suitable for publication in this department. No presentation should be over five hundred words in length.

1 Hellebrandt, F. A., Rork, Rozell, and Brogon, Elizabeth: Proc. Soc. Exp. Biol. and Med., 43:629 (April), 1940.

2 Ray, G. B., Johnson, J. R., and Taylor, M. M.: Ibid., 40:157 (Feb.), 1939.

A SIMPLE TEST FOR LATENT JAUNDICE*

With the advent of vitamin K and a quickening of our interest in the bleeding tendency accompanying the jaundiced state, a short, simply performed test for the detection of latent jaundice is of considerable importance to the medical profession.

Latent jaundice may be defined as that state of icterus existing when the bile pigments circulating in the blood are at a level above normal, and yet are not in high enough concentration to tinge the mucous membranes, skin or sclerae with the characteristic yellow color. Expressed in terms of the icterus index, it may be defined as that reading above 10 and below 20.

In other words, there is, in the patient who is developing jaundice, an interval during which the bile pigments, although increased, are not discerni-

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